analyzing each shifted location to determine whether the shifted location corresponds to the actual location of the received path ray; and

depending on the analysis results, completing the search or determining a probable location of a next most significant ray, and

wherein the at least one of the multiple time references is adjusted according to an amount based on a difference between the probable location and the determined location of a path ray.

Claim 2 (canceled).

Claim 3 (presently amended): The method of claim [2] 1, wherein if the shifted location corresponds to the actual location of the received path ray, the step of completing the search comprises locating the other path rays based on the knowledge of relative distances between the located path ray and the other path rays.

Claim 4 (presently amended): The method of claim [2] 1, wherein the step of analyzing includes:

correlating each shifted location with a pilot sequence; and

determining if the correlation results exceed a predetermined threshold.

Claim 5 (original): The method of claim 4, further comprising, if the correlation results do not exceed the threshold:

determining whether all the significant path rays have been analyzed; and

if so, initiating a complete search for the path ray locations.

Claim 6 (original): The method of claim 1, wherein the steps are initiated when the receiver switches from a time reference of low accuracy to a time reference of high accuracy.

Claim 7 (original): The method of claim 6, further comprising, when switching from the time reference of low accuracy to the time reference of high accuracy, a step of calibrating the low accuracy time reference to the high accuracy time reference.

Claim 8 (currently amended): ~~The method of claim 7~~ A method for detecting locations of path rays in a multi-path channel receiver having multiple time references, the method comprising the steps of:

searching for locations of received path rays;

determining the locations of the received path rays; and

adjusting at least one of the multiple time references according to the determined location of the received path rays,

wherein the steps are initiated when the receiver switches from a time reference of low accuracy to a time reference of high accuracy, and

the method further comprising, when switching from the time reference of low accuracy to the time reference of high accuracy, a step of calibrating the low accuracy time reference to the high accuracy time reference,

wherein the step of calibrating includes averaging measurements of the ratio of clock cycles of the time reference of high accuracy to the clock cycles of the time reference of low accuracy.

Claim 9 (original): The method of claim 1, wherein the receiver is a cellular radio.

Claim 10 (currently amended): An apparatus for detecting locations of path rays in a multi-path receiver, the apparatus comprising:

at least two time reference generators;

a tracker for tracking the path rays for a predetermined amount of time; and

a searcher for locating the path rays when the predetermined amount of time expires and the locations are lost,

wherein at least one of the at least two time reference generators are adjusted according to a location of the path rays,

wherein the searcher determines a probable location of a most significant path ray, shifts the location within a predetermined interval, and analyzes each shifted location to determine whether the shifted location corresponds to the actual location of the received path ray, wherein depending on the analysis results, the search is completed or a probable location of next most significant ray is determined, and

wherein the at least one of the multiple time references is adjusted according to an amount based on a difference between the probable location and the determined location of a path ray.

Claim 11 (canceled).

Claim 12 (presently amended): The apparatus of claim [11] 10, wherein if the shifted location corresponds to the actual location of the received path ray, the searcher locates the other path rays based on the knowledge of relative distances between the located path ray and the other path rays.

Claim 13 (presently amended): The apparatus of claim [11] 10, wherein the searcher analyzes each shifted location by correlating each shifted location with a pilot sequence and determining if the correlation results exceed a predetermined threshold.

Claim 14 (original): The apparatus of claim 13, wherein if the correlation results do not exceed the threshold, the searcher determines whether all the significant path rays have been analyzed, and if so, initiates a complete search for the path ray locations.

Claim 15 (original): The apparatus of claim 10, wherein the tracking and searching are performed when switching from a time reference of low accuracy to a time reference of high accuracy.

Claim 16 (original): The apparatus of claim 15, wherein when switching from the time reference of low accuracy to a time reference of high accuracy, the time reference of low accuracy is calibrated to the time reference of high accuracy.

Claim 17 (currently amended): ~~The apparatus of claim 16,~~ An apparatus for detecting locations of path rays in a multi-path receiver, the apparatus comprising:

at least two time reference generators;

a tracker for tracking the path rays for a predetermined amount of time; and

a searcher for locating the path rays when the predetermined amount of time expires and the locations are lost,

wherein at least one of the at least two time reference generators are adjusted according to a location of the path rays,

wherein the tracking and searching are performed when switching from a time reference of low accuracy to a time reference of high accuracy,

wherein when switching from the time reference of low accuracy to a time reference of high accuracy, the time reference of low accuracy is calibrated to the time reference of high accuracy, and

wherein the calibration includes averaging measurements of the ratio of clock cycles of the time reference of high accuracy to the clock cycles of the time reference of low accuracy.

Claim 18 (original): The apparatus of claim 10, wherein the receiver is a cellular radio.

Claim 19 (previously submitted): The method of claim 1, further comprising:

tracking the locations of the received path rays for a predetermined amount of time; and

if the locations are lost after the predetermined amount of time, initiating a new search for the locations of the received path rays.

Claim 20 (previously submitted): The method of claim 19, wherein tracking the locations includes determining the location of the path rays based on the adjusted time reference and a set of previously known path ray locations

Claim 21 (canceled).

Claim 22 (previously submitted): The apparatus of claim 10, wherein the tracker determines the location of the path rays based on the adjusted time reference and a set of previously known path ray locations.

Claim 23 (canceled).